



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent application of:

Thomas Cech et al.

Application No.: 10/044,692

Filed: January 11, 2002

For: NUCLEIC ACID COMPOSITIONS
FOR ELICITING AN IMMUNE
RESPONSE AGAINST TELOMERASE
REVERSE TRANSCRIPTASE

Confirmation No.: 3439

Examiner: Ungar, Susan NMN

Art Unit: 1642

**SUPPLEMENTAL INFORMATION
DISCLOSURE STATEMENT UNDER
37 CFR §1.97 and §1.98**

Mail Stop RCE
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In previously filed information disclosure statements, Applicants have identified certain related patents and pending non-provisional patent applications owned or co-owned by Geron Corporation with claims related to telomerase reverse transcriptase (e.g., claiming telomerase reverse transcriptase protein sequences, and/or telomerase reverse transcriptase nucleic acid protein encoding sequences, and/or telomerase reverse transcriptase promoter sequences, and/or cells or compositions comprising such protein or nucleic acid sequences, and/or the use of such proteins, nucleic acids, cell or compositions). For the convenience of the Office, in this supplemental IDS Applicants have provided an updated list (below) of related patents and applications including additional patents and applications. The tables below also show the status of pending applications and indicates where there have been one or more adverse decisions by the Office related to pending claims. Copies of the issued or most recently pending claims are included for the convenience of the examiner and are listed in the accompanying PTO/SB08B by reference number as shown in the table.

included for the convenience of the examiner and are listed in the accompanying PTO/SB08B by reference number as shown in the table.

It is understood that the Office has access to the full patent specifications, file histories, and other information via PAIR. However, should the Office require copies of any specifications or file histories the Office is urged to contact the undersigned.

In connection with the claims pending in the instant application (related to compositions containing a nucleic acid encoding a polypeptide consisting of SEQ. ID NO:2, wherein the composition elicits an adaptive immune response against hTERT) attention is drawn to U.S. Pat. Nos. 7,056,513; 7,091,021; 6,261,836; 6,337,200; 6,921,664; 6,927,285 and pending application Nos. 10/877,124; 10/044,692; 08/974,584; 09/721,506 (allowed); 10/877,146 (abandoned); and 10/862,698 (abandoned in favor of continuation). These patents and applications claim telomerase polynucleotides and/or polypeptides.

Applicants have provided this information in an attempt to assist the Office; however it is Applicants' understanding that the Examiner will conduct his/her analysis of the materials submitted herewith.

Summary

Patent No.	Title	Claims
Pat. No. 6,093,809	Telomerase	AU
Pat. No. 6,166,178	Telomerase Catalytic Subunit	AV
Pat. No. 6,261,836	Telomerase	AW
Pat. No. 6,309,867	Telomerase	AX
Pat. No. 6,444,650	Antisense Compositions For Detecting And Inhibiting Telomerase Reverse Transcriptase	AY
Pat. No. 6,475,789	Telomerized Mammalian Cells Human Telomerase Catalytic Subunit: Diagnostic and Therapeutic Methods	AZ
Pat. No. 6,617,110	Cells Immortalized with Telomerase Reverse Transcriptase for Use in Drug Screening	BA
Pat. No. 6,627,619	Antisense Compositions for Detecting and Inhibiting Telomerase Reverse Transcriptase	BB
Pat. No. 6,808,880	Method for Detecting Polynucleotided Encoding Telomerase	BC
Pat. No. 6,921,664	Telomerase	BD
Pat. No. 6,927,285	Genes for Human Telomerase Reverse Transcriptase and Telomerase Variants	BE

Patent No.	Title	Claims
Pat. No. 7,005,262	Methods for Detecting Nucleic Acids Encoding Human Telomerase Reverse Transcriptase	BF
Pat. No. 7,056,513	Telomerase	BG
Pat. No. 7,195,911	Mammalian Cells that have Increased Proliferative Capacity	BH
Pat. No. 7,091,021	Inactive Variants of the Human Telomerase Catalytic Subunit	BI
Pat. No. 6,337,200	Human Telomerase Catalytic Subunit Variants	BJ
Pat. No. 6,610,839	Promoter For Telomerase Reverse Transcriptase	BK
Pat. No. 6,767,719	Mouse Telomerase Reverse Transcriptase	BL
Pat. No. 6,777,203	Telomerase Promoter Driving Expression of Therapeutic Gene Sequences	BM
Pat. No. 6,440,735	Dendritic Cell Vaccine Containing Telomerase Reverse Transcriptase for the Treatment of Cancer	BN

App. No.	Title	Status	Pending Claims
09/432,503	Reducing Tissue Damage Due to Impaired Replication Using a Vector for Expressing Telomerase Reverse Transcriptase	In most recent O.A., previous claims were rejected under 35 USC § 112 ¶ 1 (enablement).	BO
09/721,477	Immunogenic Nucleic Acid Sequences of Human Telomerase Reverse Transcriptase	In most recent O.A., previous claims were rejected under 35 USC § 112 ¶ 1 (new matter, written description and enablement requirements); §§ 102 and 103 (citing GeneBank Accession No. AA281296).	BP
09/721,506	Nucleic Acids Encoding Human Telomerase Reverse Transcriptase and Related Homologs	Allowed	BQ
10/877,124	Vector Encoding Inactivated Telomerase for Treating Cancer	Examination on the merits	BR
10/877,146	Vaccine Containing the Catalytic Subunit of Telomerase for Treating Cancer	No examination on the merits - Now Abandoned	BS

App. No.	Title	Status	Pending Claims
10/877,022	Treating Cancer Using a Telomerase Vaccine (Immunodetection of hTERT proteins)	In most recent O.A., claims are rejected under 35 USC § 112 ¶ 1 (written description and enablement requirements); and 35 USC § 112 ¶ 2	BT
11/207,078	Sequence of Telomerase Reverse Transcriptase, and Products Derived Therefrom for Conducting Clinical Assays, Immortalizing Cells, Screening Drugs, Treating Cancer, and for Other Commercial Purposes	No examination on the merits	BU
10/044,692 (This application)	Nucleic Acid Vaccine for Eliciting an Immune Response Against Telomerase Reverse Transcriptase	In most recent O.A., previous claims were rejected under 35 USC § 112 ¶ 1 (written description and enablement requirements); and for obviousness-type double patenting over Pat. Nos. 6,093,809 and 6,261,836.	BV
08/974,584	Functional Homologs of Human Telomerase Reverse Transcriptase Containing the Telomerase T Motif	Obviousness-type double patenting rejections citing Pat. Nos. 6,261,836; 6,927,285; 6,921,664; 6,337,200; 6,475,789; 7,195,911 and Application Nos. 09/721,477; 10/877,124; 09/721,506; 11/207,078 and 10/044,692.	BW
10/053,758	Antibody to Telomerase Reverse Transcriptase	Allowed	BX
10/637,443	Identifying and Testing Antisense Oligonucleotides that Inhibit Telomerase Reverse Transcriptase	Rejection under 35 USC § 112 ¶ 1 written description and enablement requirements; and 112 ¶ 2	BY
10/862,698	Protein and Peptide Fragments from Mouse Telomerase Reverse Transcriptase	Abandoned in favor of continuation. Prior claims were rejected under 35 USC § 112 ¶ 1 written description and enablement requirements; § 102; and § 103	BZ
09/615,039	Oncolytic Virus that Replicates in Cells Expressing Telomerase Reverse Transcriptase	Abandoned Rejection under 35 USC § 112 ¶ 1 written description and enablement requirements; § 112 ¶ 2; § 102, § 103; and obviousness-type double patenting	CA
11/411,604	Telomerase Promoter Sequences for Screening Telomerase Modulators (Con of 09/615,039)	No substantive examination on the merits	CB
10/208,243	Method for Identifying and Killing Cancer Cells (Con of Pat. No. 6,440,735)	Non-final rejection under 35 USC § 112 ¶ 1 written description and 35 USC § 112 ¶ 1	CC
11/413,838	Cellular Telomerase Vaccine and Its Use for Treating Cancer	No examination on the merits	CD

App. No.	Title	Status	Pending Claims
	(Div of 10/208,243)		
10/674,836	Cancer Therapy Using the Telomerase Promoter	Rejection under 35 USC § 112 ¶ 1 written description and enablement; double patenting over 6,777,203 35 USC § 112 ¶ 1	CE

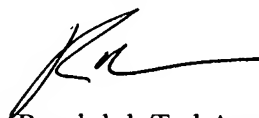
References cited on the attached PTO/SB/08A and PTO/SB/08B forms

The references cited on the attached PTO/SB/08A and PTO/SB/08B forms are being called to the attention of the Examiner. Copies of the references [in compliance with the requirements of 37 CFR §1.98(a)(2)] are enclosed. It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the “references cited” on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information, and no inference should be made that the information and references cited are, or are considered to be material to patentability because they are in this statement. No inference should be made that the information and references cited are prior art merely because they are in this statement.

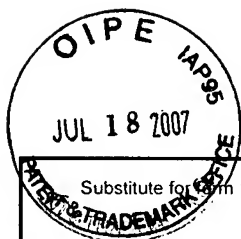
Applicant believes that no fee is required for submission of this statement. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Randolph Ted Apple', with a stylized flourish at the end.

Randolph Ted Apple
Reg. No. 36,429

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RTA:crf



INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/044,692
				Filing Date	January 11, 2002
				First Named Inventor	Cech
				Art Unit	1642
				Examiner Name	Ungar, Susan NMN
Sheet	1	of	9	Attorney Docket Number	015389-002640US

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code ² (if known)			
	AA	US-7,195,911 B2	03-27-2007	Cech et al.	
	AB	US-7,091,021 B2	08-15-2006	Morin	
	AC	US-7,056,513 B2	06-06-2006	Cech et al.	
	AD	US-7,005,262 B2	02-28-2006	Cech et al.	
	AE	US-6,927,285 B2	08-09-2005	Cech et al.	
	AF	US-6,921,664 B2	07-26-2005	Cech et al.	
	AG	US-6,808,880 B2	10-26-2004	Cech et al.	
	AH	US-6,777,203 B1	08-17-2004	Morin et al.	
	AI	US-6,767,719 B1	07-27-2004	Morin et al.	
	AJ	US-6,627,619 B1	09-30-2003	Cech et al.	
	AK	US-6,617,110 B1	09-09-2003	Cech et al.	
	AL	US-6,610,839 B1	08-26-2003	Morin et al.	
	AM	US-6,475,789 B1	11-05-2002	Cech et al.	
	AN	US-6,444,650 B1	09-03-2002	Cech et al.	
	AO	US-6,440,735 B1	08-27-2002	Gaeta	
	AP	US-6,337,200 B1	01-08-2002	Morin	
	AQ	US-6,309,867	10-30-2001	Cech et al.	
	AR	US-6,261,836	07-17-2001	Cech et al.	
	AS	US-6,166,178	12-26-2000	Cech et al.	
	AT	US-6,093,809	07-25-2000	Cech et al.	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				

Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² Kind Codes of U.S. Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/044,692
				Filing Date	January 11, 2002
				First Named Inventor	Cech
				Art Unit	1642
				Examiner Name	Ungar, Susan NMN
Sheet	2	of	9	Attorney Docket Number	015389-002640US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	AU	Claims for U.S. Patent No. 6,093,809.	<input type="checkbox"/>
	AV	Claims for U.S. Patent No. 6,166,178.	<input type="checkbox"/>
	AW	Claims for U.S. Patent No. 6,261,836.	<input type="checkbox"/>
	AX	Claims for U.S. Patent No. 6,309,867.	<input type="checkbox"/>
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	BB	Claims for U.S. Patent No. 6,627,619.	<input type="checkbox"/>
	BC	Claims for U.S. Patent No. 6,808,880.	<input type="checkbox"/>
	BD	Claims for U.S. Patent No. 6,921,664.	<input type="checkbox"/>
	BE	Claims for U.S. Patent No. 6,927,285.	<input type="checkbox"/>
Examiner Signature			Date Considered

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	BF	Claims for U.S. Patent No. 7,005,262.	<input type="checkbox"/>
	BG	Claims for U.S. Patent No. 7,056,513.	<input type="checkbox"/>
	BH	Claims for U.S. Patent No. 7,195,911.	<input type="checkbox"/>
	BI	Claims for U.S. Patent No. 7,091,021.	<input type="checkbox"/>
	BJ	Claims for U.S. Patent No. 6,337,200.	<input type="checkbox"/>
	BK	Claims for U.S. Patent No. 6,610,839.	<input type="checkbox"/>
	BL	Claims for U.S. Patent No. 6,767,719.	<input type="checkbox"/>
	BM	Claims for U.S. Patent No. 6,777,203.	<input type="checkbox"/>
	BN	Claims for U.S. Patent No. 6,440,735.	<input type="checkbox"/>
	BO	Pending claims for US patent application 09/432,503.	<input type="checkbox"/>
	BP	Pending claims for US patent application 09/721,477.	<input type="checkbox"/>
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	BQ	Pending claims for US patent application 09/721,506.	<input type="checkbox"/>
	BR	Pending claims for US patent application 10/877,124.	<input type="checkbox"/>
	BS	Pending claims for US patent application 10/877,146.	<input type="checkbox"/>
	BT	Pending claims for US patent application 10/877,022.	<input type="checkbox"/>
	BU	Pending claims for US patent application 11/207,078.	<input type="checkbox"/>
	BV	Pending claims for US patent application 10/044,692.	<input type="checkbox"/>
	BW	Pending claims for US patent application 08/974,584.	<input type="checkbox"/>
	BX	Pending claims for US patent application 10/053,758.	<input type="checkbox"/>
	BY	Pending claims for US patent application 10/637,443.	<input type="checkbox"/>
	BZ	Claims previously pending in US patent application 10/862,698 (abandoned)..	<input type="checkbox"/>
	CA	Claims previously pending in US patent application 09/615,039 (abandoned).	<input type="checkbox"/>
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	CB	Pending claims for US patent application 11/411,604.	<input type="checkbox"/>
	CC	Pending claims for US patent application 10/208,243.	<input type="checkbox"/>
	CD	Pending claims for US patent application 11/413,838.	<input type="checkbox"/>
	CE	Pending claims for US patent application 10/674,836.	<input type="checkbox"/>

Examiner Signature		Date Considered	
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